
Is Growth Immiserizing in Nigeria?

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Abstract

Nigeria has experienced quite significant growth over the past one decade, but the incidence of poverty has also increased suggesting that the growth is immiserizing. The immiserizing nature of the growth was supported by the estimates from the growth elasticity of poverty, the employment elasticity of growth and the quality of the growth spells. The determinants of immiserizing growth cut across economic, social, political and institutional factors that include dysfunctional behaviour, structure of the economy, rising inequality and resource misallocation. However, this does not imply that, at the margin, economic growth is not beneficial to the poor. The simple point is that there are many other factors other than economic growth that help explain the weak or missing linkages between macro-economic growth and household incomes. Domestic policies are necessary to reduce the various constraints inherent in the economy that makes growth immiserizing.

Keywords: Poverty, Economic growth, Inequality, Elasticity, Nigeria

JEL Classification: I32, C20.

I. Introduction

Immiserizing growth is a situation where economic growth could result in a country being worse-off than before the growth. If growth is heavily export biased it might lead to a fall in the terms of trade of the exporting country.² However, whether or not a country might suffer from immiserizing growth depends on three conditions. First, the country must be driven to export. Second, changes in these exports need to have a large impact on the good's price, and the foreign demand for these exports needs to be inelastic so that a rise in exports leads to a decline in export earnings. Third, the country must be highly dependent on exports, and exports must be a high proportion of gross national product (source).

Nigeria seems to satisfy the conditions for immiserizing growth. The economy is largely driven by crude oil export because about 95% of total export is due to crude oil and gas which accounts for 75% of government revenue (CBN, 2016). In addition,

Nigeria is sufficiently an important supplier in the global crude oil market given that an increase in its exports will drive oil prices down. Also, because the demand for oil is highly inelastic, this increase in supply would dramatically reduce oil revenues due to the fall in price. Over the period 2004 and 2015, the country earned over ₦119 trillion from crude oil exports (CBN, 2016). Concomitantly, due to the huge inflow of crude oil resources, the Nigerian economy recorded a rising growth in its GDP with about 6% per annum. Nevertheless, the oil prices declined from an average of \$94 in 2008 to \$64 in 2009 while the terms of trade also witnessed a decline from 216 to 154 over the same period (CBN, 2016; WDI, 2016). The endowment of crude oil was therefore a major factor that determined economic growth in Nigeria.

However, the reality on ground suggests that the citizens have increasingly become poorer over the same period. For example, the incidence of poverty rose from 54.4% in 2004 to 69% in 2010 while the number of Nigerians living in poverty rose from 68.7 million in 2004 to 112.5 million in 2010 (NBS, 2010). Also, the unemployment rate rose from 12.3% in 2006 to 21.4% in 2011 and 25.1% in 2014 (Ajakaiye, Jerome, Nabena and Alaba, 2016). Simultaneously, the percentage of Nigerians living in absolute poverty - those who can afford only the bare essentials of food, shelter and clothing - increased from 54.7 percent in 2004 to 60.9 percent in 2010 (NBS, 2010). This raises the question as to whether the dependence on natural resource exports revenue is not the very root of the misery that the poor is witnessing in Nigeria. If this is the case, Nigeria's growth from the revenue of crude oil exports might well be termed immiserizing growth.

Various reasons have been put forward to explain this puzzling growth condition. They range from the well-known economic mechanisms to social and institutional factors inducing dysfunctional behavior, structure of the economy, rising inequality and resource misallocation. For example, the richest 20% of Nigerians account for 38.2% of the national income while the poorest 20% own 5.4% of same in 2009 (WDI, 2016). Perhaps, the Nigerian reality is such that any rise in the international price of oil favours largely the rich. As a result, the endowment of natural resources seems to have impeded capital accumulation and left the country in a self-reinforcing mechanism of dependence on the export of raw materials resulting in poverty traps.

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² It involves a decrease in the country's terms of trade resulting from this growth, which is of sufficient magnitude to reduce the country's real income.

A number of studies (Okoroafor and Nwaeze, 2013; Ijaiya, Ijaiya, Bello, Ajayi, 2011; Ebong and Ogwumike, 2013; Bakare, 2014; Nuruddeen and Ibrahim, 2014; Ugwu, 2012; Akanbi and Du Toit (n.d), Aigbokhan, 2000; Rasaki, 2016) have made attempt to examine the growth, poverty and inequality relationship for Nigeria. The studies have examined the impact of growth on poverty only at the aggregate level utilizing both absolute and relative poverty measures. In addition, there has never been a systematic study of this phenomenon integrating diverse explanatory frameworks and the empirical literature on poverty. The analysis of the relationship between economic growth and poverty are mainly quantitative exercises and has largely ignored the determinants of the immiserizing growth. Economic growth is regarded to lead directly to a reduction in poverty when the economic assets of a country are distributed equitably.

Consideration should therefore be given to understanding the main determinants of immiserizing growth in Nigeria. This is because the government has adopted various policy measures such as the Poverty Reduction Strategy Paper, Vision 2020, Seven Point Agenda and the Economic Growth and Recovery Plan. Despite these adoptions, growth has been found not to be inclusive in Nigeria given the increasing level of poverty in Nigeria. The situation has not changed over the decades, but is increasing. For example, the level of poverty maintained a constant rise, reaching its all-time high of 72 percent by August 2016 (Eke, 2016). Poverty and hunger have remained high in rural areas, remote communities and among female-headed households and these cut across the six geo-political zones, with prevalence ranging from approximately 46.9 percent in the South West to 74.3 percent in North West and North East (UNDP, 2016).

Thus, an exploration of the determinants of such immiserizing growth is imperative not only because of the ethical imperative of reducing absolute deprivation for the entire citizens, but also because an exploration of the extreme phenomenon could shed light on socio-economic mechanisms which may illuminate the distributional impact of economic growth across the income distribution. The present research study aims to fill this void drawing on both its estimated evidence and empirical evidence in the literature. It provided detailed analysis to arrive at the drivers of Immiserizing Growth for Nigeria. The rest of the study is divided into five sections. Section two highlights the stylized facts on growth and poverty while section three provides a brief review of the related literature. The analytical framework is discussed in section four while section five presents the empirical analysis and the factors behind the non-inclusiveness of growth in Nigeria. Section six concludes.

II. Economic Growth in Nigeria: Stylized Facts

Prior to the discovery of crude oil, agriculture used to be the major growth driver of the Nigerian economy. The positive oil price shock recorded in 1973/74 led to about

threefold increase in oil export revenue from N1.8billion in 1973 to N5.3 billion in 1974 (Figure 1). This was attributed to the increase in the oil price from an average of \$9 per barrel to \$29 per barrel (World Bank, 2016). This set the pace for a series of positive oil price shocks witnessed in Nigeria as shown in Figure 1. Consequently, the huge inflow of oil revenues during the oil boom of the 1973/74s saw Nigeria's per capita income jump from \$251 in 1973 to about \$871 in 1980, thereby tossing Nigerian from a poor to a middle income country (WDI, 2016). The country also witnessed dramatic expansion in real wages, private per capita consumption, social services and overall improvement in welfare during the period.¹ Economic growth increased from 3.3% in 1972 to 6.7% in 1979 (CBN, 2016). While the proportion of people living in poverty might not have declined significantly, the atmosphere of the new-found affluence relegated the issue of poverty into the background.

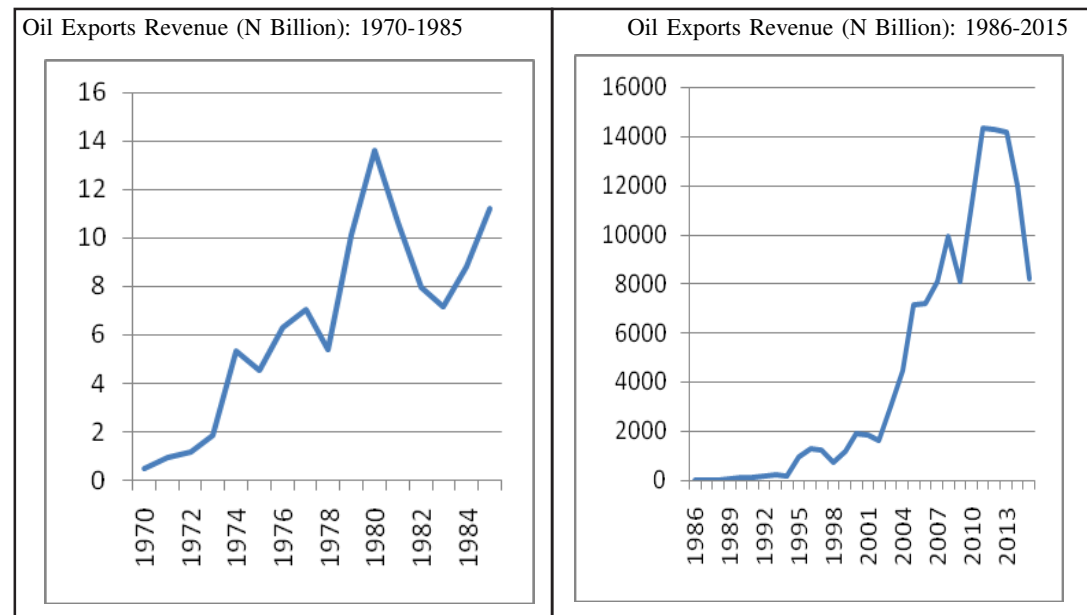


Figure1: Oil Exports Revenue in Nigeria

Source: National Bureau of Statistics: Harmonized Nigeria Living Standard Survey (2010).

However, the precipitous fall in oil prices between 1980 and 1985, and the attendant sharp fall in living standards brought the hand bite of poverty to the forefront, especially among the professional classes, formal sector entrepreneurs, and urban wage earners, who were the major beneficiaries of the oil wind fall (Okunmadewa, 1997). As a result, economic growth was negative between 1981 and 1984 (Figure 2) while per capita income declined from \$806 in 1981 to \$240 in 1985. Hence, the poverty incidence increased from 27.2% to 46.3% in 1985 (Table 1).

³ The salary increase of 1974 which was popularly referred to as the Udoji award increased the minimum wage from ₦312 Naira per annum to ₦720 Naira per annum.

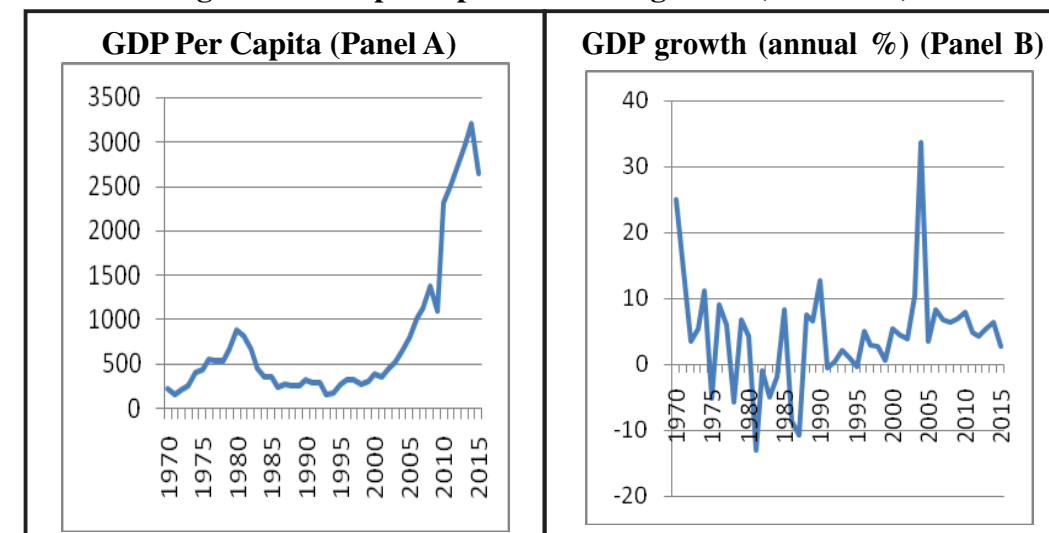
Table 1: Poverty Incidence in Nigeria: 1980-2010

Year	Poverty Incidence	Estimated Population (Million)	Population in poverty
1980	27.2	65	17.1
1985	46.3	75	34.7
1992	42.7	91.5	39.2
1996	65.6	102.3	67.1
2004	54.4	126.3	68.7
2010	69.0	163	112.47

Source: National Bureau of Statistics: Harmonized Nigeria Living Standard Survey (2010).

Thereafter, the Structural Adjustment Program (SAP) was implemented in 1986. Under the SAP regime, Nigeria reformed its foreign exchange system, public sector, trade policies, and business and agricultural regulations. Despite the efforts of structural adjustment, the GDP per capita largely fluctuated and declined to \$153.64 in 1993 (Figure 2: Panel A). Although the poverty incidence declined to 42.7% in 1992 from 46.3% in 1985, the population of people living in poverty increased from 34.7million to 39.2 million between 1985 and 1992 (Table 1). Given the adverse economic conditions, SAP was discontinued in 1993 and was replaced with the policy of guided deregulation. The poverty incidence increased to 65.6% in 1996. Economic growth however averaged 1.9% between 1993 and 1999 (Figure 2: Panel B).

Figure 2: GDP per capita and GDP growth (annual %)

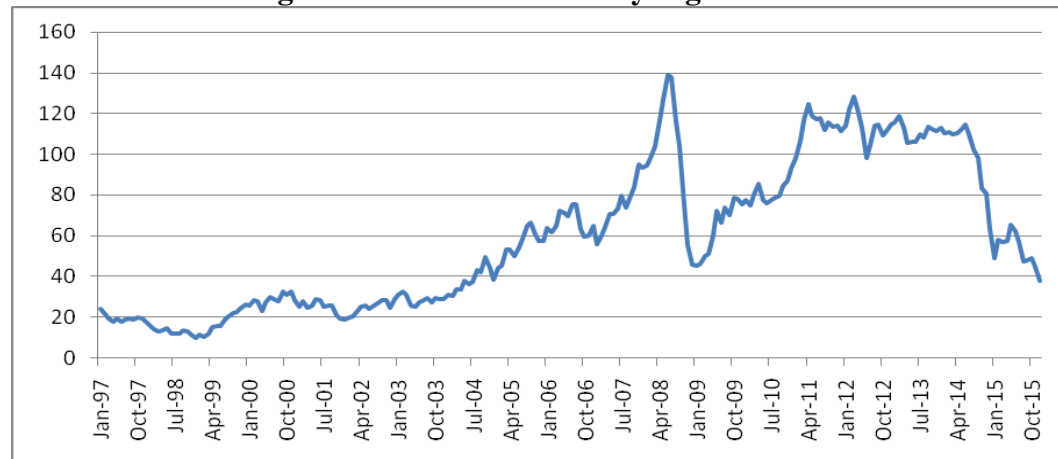


Source: World Bank World Bank Development Indicators (2016).

The restoration of democracy in 1999 saw an upward trend in growth. Economic growth averaged 4.8% between 1999 and 2003 (Figure 2). The National Poverty Eradication Programme (NAPEP) was established in 2001 specifically to stem the rising poverty level. The programme goals include training youths in vocational trades, support internship, support micro-credit, and create employment in the automobile industry. It is complemented by the activities of the National Poverty Eradication Council (NAPEC) which coordinated the poverty reduction related activities of all the relevant Ministries, Parastatals and Agencies. The foundation for the revamping of the economy was therefore laid with the adoption of the National Economic Empowerment and Development Strategies (NEEDS) as the Poverty Reduction Strategy Paper for Nigeria. Perhaps as a combination of these strategies, the poverty incidence thereafter declined to 54.4% (Table 1).

Economic growth nevertheless began an upward climb from 2004 fuelled by an increase in crude oil prices. Oil price witnessed a surge as it increased from \$29 in January 2004 and peaked at \$143 per barrel in July 2008 (Figure 3). Economic growth was rapid over the period and averaged 6.5% between 2005 and 2010. Growth nevertheless declined on the average between 2011 and 2015 to 5.2 before plummeting to 2.6% due to the fall in crude oil price. In addition, the Nigerian economy ranked 26th in the world in terms of GDP (nominal: 30th in 2013 before rebasing, 40th in 2005, 52nd in 2000), and became the largest economy in Africa (based on rebased figures announced in April 2014). As a result of the statistical revision, Nigeria's GDP for 2013, was N80.2 trillion (US\$509.9 billion) (CBN, 2015). This is an increase of about 89% based on the old GDP estimates for 2013 which was N42.4 trillion (or US\$269.5 billion). However, the poverty incidence which was expected to decline given the array of domestic policies and programmes to combat poverty recorded an upward trend. The rate increased to 69% in 2010 while the proportion of the population living in poverty also increased from 68 million to 112.47 million in 2010 (NBS, 2010).

Figure 3: Trend in the Bonny Light Oil Price



Source: United States Energy Information Administration

A further breakdown of the population living in poverty into extremely poor, moderately poor and non-poor in Table 3 revealed that the proportion of the extremely poor increased from 6.2 percent in 1980 to 29.3% in 1996 and then came down to 22.0% in 2004. The percentage reached a peak of 38.7 in 2010 (Table 2). In the case of the moderately poor, the picture was quite different as the proportion recorded increased between 1980 and 1985 from 21.0 percent and 34.2 percent respectively. It went down between 1996 and 2004, from 36.3% to 32.4%. It further went down to 30.3% in 2010. On the other hand, the proportion of non-poor was much higher in the country in 1980 (72.8 percent) compared to 1992 (57.3 percent) and 1996 (34.4 percent). Although it rose to 43.3 percent in 2004, it dropped to 31 percent in 2010 (Table 2). The upshot of the foregoing is that the citizens are becoming worse-off despite the economic prosperity recorded over the years giving the immense wealth from crude oil exports.

Table 2: Relative Poverty: Non-poor, Moderate poor and Extremely Poor, 1980-2010.

Year	Non-poor	Moderately poor	Extremely poor
1980	72.8	21.0	6.2
1985	53.7	34.2	12.1
1992	57.3	28.9	13.9
1996	34.4	36.3	29.3
2004	43.3	32.4	22.0
2010	31.0	30.3	38.7

Source: National Bureau of Statistics: 2010 Harmonized Nigeria Living Standard Survey

There is also a regional dimension to poverty in Nigeria. For example, an analysis of the poverty incidence using different poverty measure revealed that the North West, North East and the North Central have the highest incidence of poverty across the geopolitical zones in Nigeria (Table 3). The South West geo-political zone nevertheless recorded the least incidence of poverty in 2010. This is despite the huge inflow of revenue from crude oil, economic growth recorded and the number of poverty alleviation programmes implemented. This therefore presents a paradox of an increasing growth and increasing poverty scenario.

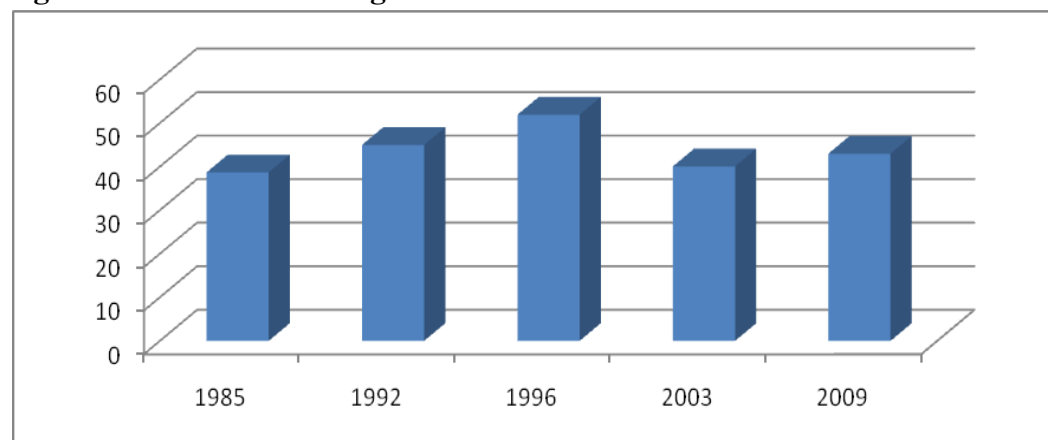
Table 3: Zonal Incidence of Poverty by different Poverty Measure

Zone	Food Poor	Absolute Poor	Relative Poor	Dollar Per Day
North Central	38.6	59.5	67.5	59.7
NorthEast	51.5	69.0	76.3	69.1
North West	51.8	70.0	77.7	70.4
South East	41.0	58.7	67.0	59.2
South-South	35.5	55.9	63.8	56.1
South West	25.4	49.8	59.1	50.1

Source: National Bureau of Statistics: Harmonized Nigeria Living Standard Survey

Diverse explanations have been given to discern the paradox. One of the explanations is the rising inequality in the Nigerian economy during the period. The Gini index increased from 38.6 in 1985 to 44.9 in 1992 (Figure 4). The index rose further to 51.9% in 1996 before declining to 40.0 in 2003. This Gini index nevertheless increased to 42.9 in 2009 indicating rising inequality in Nigeria. A further breakdown of the data revealed that the largest income share is held by the highest 20% of the population while lowest, second and third 20th quintile of the population are largely excluded with respect to the income share available to them (Table 4). Perhaps, the increase in inequality could have offset the poverty-reducing benefits from the growth. The country also did not make any appreciable improvement in the Human Development Index (HDI). Nigeria was ranked 152 amongst countries with low development index at 0.514 out of 187 countries that were ranked in the 2014 Human Development Report (Figure 5). This therefore highlights that the growth being witnessed is immiserizing.

Figure 4: Gini Index for Nigeria



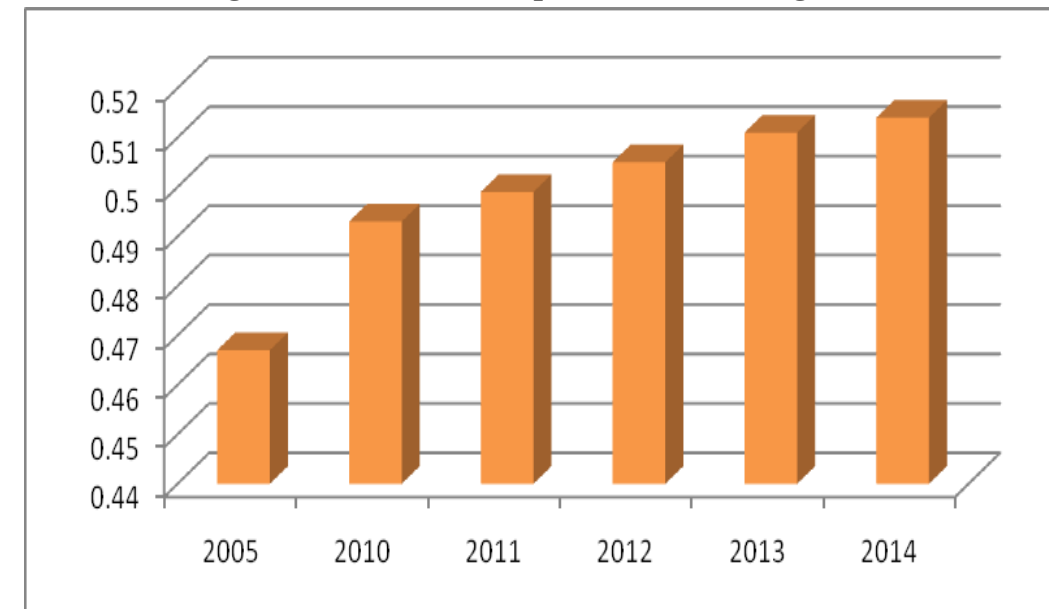
Source: World Bank World Development indicator

Table 4: Income distribution across groups in Nigeria

	1985	1992	1996	2003	2009
Income share held by lowest 20%	6.02	3.98	3.66	5.67	5.37
Income share held by second 20%	10.41	8.93	7.72	10.37	9.71
Income share held by third 20%	15.52	14.37	12.3	15.4	14.36
Income share held by fourth 20%	23.04	23.41	19.79	22.53	21.58
Income share held by highest 20%	45.01	49.32	56.52	46.04	48.99

Source: World Bank World Development Indicator (2016)

Figure 5: Human Development Index for Nigeria



Source: Authors' computation from statistics obtained from World Bank WDI (2016)

In addition, the oil boom of the 1970s led Nigeria to neglect its strong agricultural and light manufacturing bases in favor of an unhealthy dependence on crude oil. As a

result, the productive base of the Nigerian economy remains weak, narrow and externally-oriented with primary production activities of mining and quarrying (including crude oil and gas) accounting for about 9.75 percent and over 80 percent of government revenues (Table 5). In contrast, secondary activities comprising manufacturing and agriculture, which traditionally have greater potential for broadening the productive base of the economy and generating employment account for 32.6 percent of gross output (Table 5). The change in the trend of the contribution of services and distributive trade to GDP was noticeable from the year 2010 due to the rebasing of the GDP. Thus, the tertiary activities (services and trade) which depend on wealth generated by the productive sectors for their operations comprise about 53.7 percent of gross output (Ajakaiye and Babatunde, 2015). Hence, the current productive structure may encourage growth to be immiserizing.

Table 5: Sectoral Contribution to GDP

	Agric.	Industry	(a) Crude Petroleum & Natural Gas	(b) Solid Minerals	(c) Manufacturing	Const- ruction	Trade	Services
1981	15.50	43.28	32.62	0.44	10.22	5.58	11.60	24.04
1985	18.26	42.66	32.89	0.30	9.47	2.25	11.56	25.27
1990	17.95	44.19	35.39	0.15	8.65	2.29	11.51	24.06
1995	19.54	39.23	31.33	0.08	7.82	2.61	11.97	26.64
2000	20.44	37.19	30.74	0.09	6.36	2.76	11.29	28.32
2005	25.40	31.15	24.80	0.08	6.27	2.32	12.78	28.35
2010	23.89	22.03	15.39	0.09	6.55	2.88	16.47	34.73
2011	23.35	22.39	14.95	0.10	7.33	3.16	16.76	34.34
2012	23.91	21.74	13.64	0.12	7.98	3.32	16.44	34.59
2013	23.33	20.59	11.24	0.13	9.22	3.59	16.62	35.87
2014	22.90	20.54	10.44	0.14	9.95	3.82	16.57	36.17
2015	23.11	19.30	9.61	0.15	9.54	3.88	16.95	36.76

Source: Central Bank of Nigeria Statistical Bulletin (2015)

In summary, the stylized facts presented in this section focused on establishing the reasons behind the immiserization growth (non-inclusive growth) witnessed in the Nigerian economy over the years. It revealed the oil dependency and structural constraints embedded in the economy. It also shows how the performance of the

economy has not translated into a significant reduction in poverty in the presence of rising inequality and weak productive capacity. Thus, the growth performance of the Nigerian economy over the years has not been pro-poor. Poverty remains a huge challenge despite the rising growth in the country's gross domestic product and implementation of poverty alleviation programmes.

III. Review of Related Studies

The theoretical foundation for the discussion on immiserizing growth was laid by Bhagwati (1958). The conceptual framework of immiserizing growth was expressed in a traditional two - country, two - commodity model with full employment. He argues that the effect of economic growth will be positive if the terms of trade will not move against the growing country enough to deprive it of all gain from growth. The effect will however be negative if the price of imports will have to rise still further to preserve equilibrium, and the growing country will actually be made worse off by growth.

According to Bhagwati, the possibility of immiserizing growth is increased if the ratio of domestic production to imported goods is small, i.e. if the constant-utility demand-elasticity for imported goods with respect to a change in the price of imported goods is small, and if the elasticity in supply of imported goods when production shifts along the production-possibility curve in response to a change in the price of imported goods is small. Thus, the paradox presented by Bhagwati (1958) is that an open economy experiencing an expansion in its productive capacity as a result of economic growth or technological progress can become worse- off if its terms of trade deteriorate sufficiently and offset the beneficial effects of economic growth. Consequently, this path-breaking example set up the stage for the development of the generalized theory of distortions and welfare which constitutes the analytical framework for the modern theory of commercial policy (Dinopoulos 2005).

Johnson (1967) produced another example of immiserizing growth in which a small open economy facing an exogenously imposed tariff could become worse off as a result of economic expansion. Johnson highlighted the possibility of real income falling when growth occurs in protected import-substituting industries. However, the model indicated that the fall in a country's terms of trade is not a necessary condition for immiserizing growth. Similarly, some other studies (Uzawa, 1969; Hamada, 1974; Brecher and Diaz-Alejandro, 1977; Todorova, 2010) proved that building tariff barriers with the aim to attract foreign investment can also bring the economy into immiserization. Samuelson (2004) argued that immiserizing growth could exist in industrialized countries if the terms of trade shifted against manufactured goods due to the introduction of import substitution industrialization in their main trading partners.

Nevertheless, Bhagwati (1968) and (1971) related formally the three fundamental theoretical ingredients of the theory of commercial-policy theory: welfare, distortions and growth. The analyses further buttressed the Bhagwati (1958) submission that in the presence of economic distortions, economic growth might cause deterioration in the level of social welfare. Todorova (2010) however proved that growth would be immiserizing only for products for which world demand is inelastic and expansion leads to a sizable worsening of the terms of trade. Examples of such commodities are agricultural goods such as coffee, cocoa, cotton, sugar, tea, tobacco and natural resources products such as crude oil. In the case of crude oil, because its demand is price inelastic, increased production and exports can lower world prices and reduce net export revenue. Todorova concluded that it is unlikely that exporting countries fall into immiserization in the case of manufactured products whose demand are highly elastic.

Nevertheless, there are arguments in the literature that the concept of immiserizing growth is more of a theoretical possibility than a real-life problem. For example, Krugman and Obstfeld (2003) highlighted the limitations of Bhagwati's analysis. According to them, strongly export biased growth must be combined with very steep relative supply (RS) and relative demand (RD) curves, so that the change in the terms of trade is large enough to offset the initial favorable effects of an increase in a country's productive capacity. In the perspective of Dinopoulos (2005), Bhagwati's fundamental insight was termed an elegant application of the theory of the second best. In addition, Wei and Zhang (2013) argued that immiserizing growth is usually dismissed as a theoretical curiosity for a market economy with no practical relevance. Pryor (2007) also disagreed that empirically, cases of immiserizing growth have been rare (Shaffer 2016).

However, there are counter-arguments that immiserization can be a real world phenomenon. What is important is the steepness of the world relative demand for the good (Todorova, 2010). It is only commodities with inelastic relative demand in which the production is expanding that will lead the country into immiserization. This condition will hold if the production expansion results in lower prices, lower revenues and lower profitability. If however the world relative demand is elastic, immiserizing growth would hardly occur or its consequences for the economy will be negligible. We can therefore conclude that for manufactured products the demand for which is highly elastic, it is unlikely that exporting countries will fall into immiserization, therefore, growth and further participation in global trade turn out to be quite beneficial.

Based on this conclusion, there exist a number of empirical studies in the literature that examined the concept of immiserizing growth. The bone of contention among such studies has been on whether economic growth is increasing or decreasing in welfare (poverty). For example, cross-country data, based on nationally representative

household surveys, strongly supports the view that growth reduces poverty, on average (Ravallion, 2001; Dollar and Kraay, 2002; Bourguignon, 2003; Adams, 2011; Kraay, 2006; Foster and Szekely, 2008; Chambers and Dhong, 2011). The empirical evidence at the cross-country level points to three possibilities: (i) growth reducing poverty on average, (ii) heterogeneity in the growth/poverty reduction relationship and (iii) growth without poverty reduction. However, the direction, strength and goodness of fit of the relationship depend on the measures of poverty, income and growth used in the empirical analysis. By way of illustration, elasticity values tend to be lower for those indices which assign more weight to lower incomes while elasticity values tend to be higher when growth is defined in terms of survey mean income or consumption as opposed to GDP/cap (Shaffer, 2016).

Deininger and Squire (1996) identified 91 intervals or episodes for which income growth and changes in income distribution are available. They found that changes in income distribution are generally small, so that growth is clearly associated with increasing incomes in each quintile of the population. In more than 81% of their 91 growth episodes, the incomes of the poorest quintile rose (Hassan, 2015). Similarly, Roemer and Gugerty (1997) examined the question of whether economic growth tends to reduce poverty, where poverty is measured by the incomes of the poorest 20% and 40% of a population. The study revealed that an increase in the rate of GDP growth translates into a direct one-for-one increase in the rate of growth of average incomes of the poorest 40%. The GDP growth of ten percent per year is associated with income growth of ten percent for the poorest 40% of the population. For the poorest 20%, the elasticity of response is 0.921 while GDP growth of 10% is associated with income growth of 9.21%. These results provide strong support to the proposition that growth in per capita GDP can be and usually is a powerful force in reducing poverty.

Also, Ravallion and Chen (1997) analyzed a more selective set of household survey results, covering the period since 1980. Their results are striking and give strong support to the hypothesis that growth reduces poverty in developing countries. The literature also posits that the level of economic development —as measured by real GDP per capita —will reduce poverty. As Shorrocks and van der Hoeven (2004) have noted, increased economic welfare in a country on average makes everyone better-off. As a result, Sachs (2005) observed that the main pro-poor growth strategy is to ensure that countries climb the ladder of economic development. Ulriksen (2012) reported that the higher levels of economic wealth, measured as GDP per capita, the lower the rate of poverty in selected developing countries.

On the contrary, Barrett (1998) utilizing a variant of immiserizing growth, explained the paradox of increasing poverty and food insecurity amidst accelerating growth in Madagascar in the 1990s. The study noted that the welfare losses among the poor

which were attributed to rising rice prices led to an increase in agricultural output as smallholders attempted to stave off further deterioration. Cunguara and Hanlon (2012) identified a number of potential explanations for the apparent strong GDP performance amid stagnating levels of poverty in Mozambique between 2002 and 2009. The core explanations included: (i) rises in staple food prices which negatively impacted on both urban and rural poor (many of the latter are net food purchasers); (ii) enclave-type production, such as aluminium and oil, with few linkages to the local economy and (iii) poverty traps due to cash and credit constraints among poor farmers, who are too poor to sell their produce (Shaffer, 2016).

A complementary analysis provided by Arndt, Jones and Tarp (2016) identified fuel, food price and weather-related shocks in 2008 and low agricultural productivity (in the context of enclave production) as the key sources of stagnating poverty reduction in Mozambique. They noted that official GDP/cap growth statistics are likely to have been overestimated. Hamada and Iwata (1984) showed that large increases in the price of imported oil can also lead to immiserizing growth. Sawada (2003) recognized that immiserizing growth must involve some form of sub-optimality and arises in the presence of a sufficiently large distortion in the economy. Thus, immiserizing growth could be avoided by removing the distortion. In separate discussions, Amin (1976) and (2003) argued that marginalism in the Global South due to global economic integration undermines traditional producers and depress wages in export agriculture, which translates to pauperization in urban areas. Wei and Zhang (2013) argued that a non-trivial portion of the Chinese high growth rates in recent years may be a case of immiserizing growth. In particular, a rise in the sex ratio imbalance may have simultaneously generated utility loss and additional economic growth that is not sufficient to offset the utility loss. The study estimated that as much as 20% of the Chinese growth may be in that category.

Grimm and Günther (2007) examined an apparent case of immiserization growth in Burkina Faso between 1994 and 2003 when robust GDP growth did not translate into poverty reduction. They adjusted the household survey data to facilitate consistency of poverty estimates over time. While these adjustments explained away some of the apparent findings of worsening poverty, they still found increasing poverty levels between 1994 and 1998 despite healthy GDP growth. The authors attributed this finding to food price shocks due to drought and the devaluation of the CFA franc. In another study, Grimm, Wetta, and Nikiema (2016) attributed the very low poverty elasticity of growths (PEGs) in Burkina Faso over the past twenty years to food price inflation due to high population growth in the context of stagnant agricultural productivity and the lack of structural transformation of the urban economy.

Donaldson's (2008) comparative analysis examined a number of negative outliers, or countries where incomes of the poor fared worse than expected in light of overall income growth. The study reported cases of immiserization growth in the case of

Colombia (1970-79), where land reform was partially reversed and other progressive social policies dismantled; China (1990-95), where policy shifted from rural to urban-based development and Singapore (1978-83), where labour-displacing technology was introduced and job losses ensued. Tanzania is another potential case where poverty increased quite modestly between 2000 and 2007 despite robust GDP growth. The identified factors for this trend include limited growth in agriculture and rising prices of basic goods, including food. Another critical factor includes the measurement error associated with different price deflators used for the national account and household survey data, with the effect of over-estimating the former (Shaffer, 2016).

Also, related discussion on immiserization growth in the literature was situated in the context of macroeconomic variables that matters for growth and poverty. For example, poverty was reported to be decreasing in educational attainment. Plamer-Jones and Sen (2003) noted that rural households in India whose main earning member does not have formal education or has attended only up to primary school are more likely to be poor than households whose earning members have acquired secondary and post-secondary qualifications. Anyanwu (2012) reported that for Nigeria as a whole, it is only general post-secondary education that significantly reduces poverty while having no education significantly increases the level of poverty in the country. Verner (2004) reported that educational attainment is the single most important poverty-reducing factor. According to the study, all levels of education from primary to tertiary are significant and negatively associated with the probability of being poor. Nonetheless, Tilak (2007) noted that literacy (mere literacy) and primary education are positively related to poverty ratio. Therefore, middle level education (secondary level) may serve as a threshold level for education to influence poverty. Sinha et al., (2002) argued that the most important shocks driving the incidence of poverty include: illness, violence and conflict, natural disasters, harvest failure, terms of trade deterioration, and loss of employment.

In addition, there are evidences that increasing inflation can fuel the incidence of poverty. For example, the persistent rise in the general price level can lowers the overall purchasing power of households and tends to raise poverty. Braumann (2004) and Adeyemi, Ijaiya and Raheem (2009) reported that there is a positive correlation between inflation and poverty. This finding was corroborated by Anyanwu and Erhijakpor (2010). Chani et al. (2011) analysed the determinants of poverty in Pakistan between 1972 and 2008 and reported that inflation has positive effect on poverty. Population growth was equally identified as a determinant of poverty at the macro and micro level.

Further, utilizing cross country data, Adeyemi, Ijaiya and Raheem (2009) reported that increase in population causes increase in the level of poverty in the Sub-Saharan Africa sub-region. Also, Klasen and Lawson (2007) identified high population growth as a distortion on per capita growth prospects in Uganda. It contributes significantly

to low achievement in poverty reduction and is associated with households being persistently poor and moving into poverty. Micro-level evidences (Lanjouw and Ravallion, 1994; Szekely, 1998; Gang, Sen and Yun, 2004; Anyanwu, 2005) abound to support the findings at the macro level that large households are associated with poverty.

Another part of the literature also placed emphasis on the determinants of chronic poverty including the possibility of poverty traps. For example, income inequality has been identified as a strong determinant of poverty in the literature. At the country level, a number of studies (Datt and Ravallion, 1992, for Brazil and India; Kakwani, 1993, for Cote d'Ivoire) have found positive effects of inequality and income on poverty. Ali and Thorbecke (2000) found that poverty is more sensitive to income inequality than it is to income. Adams (2004) provides elasticity estimates showing that the growth elasticity of poverty is larger for the group with the smaller Gini coefficient (less inequality). Fosu (2010) finds that the responsiveness of poverty to income growth is a decreasing function of inequality, and that the income elasticity of poverty is actually smaller than the inequality elasticity (Anyanwu, 2013).

In the case of Nigeria, Aigbokhan (2000) found evidence of worsening inequality and poverty in spite of economic growth. Utilizing the food energy intake (FEI) method, a variant of the absolute poverty approach, the study found also that male-headed households seem to have fared worse, and that poverty is more pronounced in rural areas and in the northern regions (zones). The poor policy stance during the structural adjustment period was reported to have contributed to increased poverty. On the contrary, Ijaiya, Ijaiya, Bello, and Ajayi (2011) examined the impact of economic growth on poverty reduction in Nigeria by taking into consideration a time subscript and a difference-in-difference estimator that describes poverty reduction as a function of changes in economic growth. The result obtained indicated that the initial level of economic growth is not prone to poverty reduction, while a positive change in economic growth is prone to poverty reduction.

Ukpong, Ekpebu and Ofem (2013) analyzed the relationship between economic growth, population and poverty in Nigeria. The result showed a positive relationship between poverty rate and population growth on one hand, and negative relationship between GDP real growth rate and poverty rate on the other hand. Bakare (2014) examined the existence of significant relationship between economic growth and poverty in Nigeria. The empirical findings demonstrated a significant and direct relationship between economic growth and poverty in Nigeria. In other words, the impressive growth of the economy in recent times could not yield an improvement in poverty. The results were corroborated by Nurusdeen and Ibrahim (2014). Ogbeide and Agu (2015) examined the direction of causality between poverty and inequality in Nigeria. Adopting the Granger causality techniques, the study found out that there is a direct

line of causality between poverty and inequality. The channel of transmission is through unemployment and low life expectancy which exacerbate poverty in Nigeria. Hassan (2015) noted that there is a weak relationship between the unemployment rate and the Nigerian Gross Domestic Product (GDP) growth rate. Rather than an inverse relationship, a positive relationship was found. That is, unemployment is increasing in GDP. The implication is that the GDP growth has not impacted positively on the poor through job creation sufficient enough to reduce the percentage of the unemployed and the incidence of poverty in Nigeria. Ajakaiye et al. (2016) corroborated the findings of Hassan (2015). They examined the relationship between growth and employment in Nigeria to gain insights into the country's paradox of high economic growth alongside rising poverty and inequality. Adopting the Shapley decomposition approach, complemented with econometric estimation of the country's employment intensity of growth, the findings revealed that Nigeria's growth over the last decade has been jobless and sustained largely by factor reallocations rather than productivity enhancement. Labour reallocations have been mainly from agriculture and manufacturing towards the low productive services sector. The positive and low employment elasticity of growth reflected the country's poor overall employment generation record, especially in manufacturing. Thus, the Nigerian literature largely supported the findings that growth is increasing in poverty.

Economic growth in the case of Nigeria has occurred without a reduction in poverty while income distribution has become more unequal. Growth is more likely to lead directly to a reduction in poverty when the economic assets of a country are distributed relatively equally or when economic growth is based on the intensive employment of abundant factors of production, which for most countries is labor. Nigeria is an oil rich economy which will typically have very concentrated income distributions given that the country's wealth is in very few hands. Consequently, when growth comes from mineral exports, the market mechanisms that would involve the lower income groups in that growth are weak.

Taking an overview of these studies, it is obvious that a number of (or all) the identified mechanisms of impoverishment may, in fact, be the driving forces of immiserizing growth. While this list is far from exhaustive, it gives an idea of the extent, and diversity of experience, of immiserization growth. The concept of immiserizing growth may constitute an integrating framework which facilitates the analysis of the discussion from a range of perspectives. However, the main caveats with many of these studies bothers on the consistency of household survey results over time and divergences between household survey and national accounts data due to measurement or estimation issues. Also, cross-country regressions are limited in providing policy relevant findings about correlates of poverty reduction (conditional on growth) because such models aggregate across very different types of countries characterized by different processes

linking growth and poverty reduction. Consequently, more investigation is required to explain the factors behind immiserization. Nevertheless, the cases reviewed suggest, prima facie, that immiserizing growth is not insignificant as an empirical phenomenon. A logical next step is to provide a detailed country analysis drawing out the drivers of such experience for Nigeria as an oil exporting economy.

IV. Methodology

In this section we discuss the assessment of the pro-poorness of growth using the growth elasticity of poverty approach. The growth elasticity of poverty is calculated using the absolute measures of poverty while the empirical analysis of the growth and income is carried out with relative measures. It is a common knowledge that the choice of the measure of poverty at absolute or relative term is a contentious issue. While the absolute concept considers growth as pro-poor if growth leads to poverty reduction irrespective to what happens to the income distribution¹, the relative concept assumes growth as pro-poor only if the growth rate of the poor is higher than the average growth rate (if the poor benefit relatively more from growth than the average).² Although this study considers both concepts in the analysis, the final choice should be left to the policy maker depending on his specific objective on pro-poorness of growth.

4.1. The growth-elasticity of poverty

The growth-elasticity of poverty, $\hat{\epsilon}$, calculates how much poverty increased or decreased given a one percent increase in GDP per capita. It can be computed by relating the relative change in poverty (P) between t and $t-1$ to the relative change in income (Y) in the same period:

$$\epsilon_t = \frac{\Delta(P_t/P_{t-1})}{\Delta(Y_t/Y_{t-1})} \quad (1)$$

The GDP per capita is adopted as the measure of economic growth while poverty is defined as poverty headcount ratio at the 2011 PPP international poverty line (at \$1.90/day) or poverty gap. These proxies are employed in order to reduce the associated higher values that are inherent in growth elasticities when using survey means income/consumption rather than GDP/cap growth.

⁴ Ravallion (2004).

⁵ Kakwani and Pernia, 2000; McCulloch and Baulch, 2000); Klasen, 2004; Grimm and Günther, 2005.

When the value of growth-elasticity of poverty is negative, it implies that the economic growth has led to poverty reduction and when it is positive, economic growth has worsened poverty.

4.2 Data

The data is sourced from the World Bank's POVCALNET database and the World Bank World Development Indicator. The POVCALNET database is the dataset underlying the World Bank's widely known global poverty estimates. Its data on average incomes and income distribution are based on primary household survey data which are representative for the whole country.

V. Empirical Analysis

This section discusses the growth elasticity of poverty in Nigeria and empirical estimation of the equations necessary to establish whether growth is immiserizing in Nigeria and the determinants of such immiserization. In addition, the section presents additional evidence from other studies to show the extent of immiserization.

Growth Elasticity of Poverty

In the case of Nigeria, we present the growth-elasticity of poverty over the period of 1985 to 2015 using the absolute measures of poverty: headcount and poverty gap. From Table 6, the growth elasticity of poverty using both the poverty headcount and poverty gap was negative between the periods of 1992 and 1995; and 1996 and 2002. This implies that during these periods, economic growth recorded led to poverty reduction. However, between 2003 and 2008 as well as 2009 and 2015, economic growth worsened the poverty level given the positive value of growth-elasticity of poverty. The results remain unchanged when poverty gap is used as a measure of poverty.

From these results, we can summarily state that the modest economic growth experienced between 1985-1991 and 1992-1995 was pro-poor while the growth recorded during the 2003- 2008 and 2009-2015 period when the economic growth grew appreciably was immiserizing. This was the period that the economy recorded a huge inflow of crude oil export revenue and remarkable economic growth. This shows again that the relationship between growth and poverty can enormously vary over time and space and that average elasticities derived from cross-country regressions cannot be generalized and might be of limited use.

Table 6: Growth elasticity of poverty (Growth of GDP per capita used for growth rates)

Year	headcount	Grohc	pov gap	gropg	pcgdp	pcgdpgr	povheac	povgap
1985-1991	45.266	-	16.995	-	639.542	-	-	-
1992-1995	57.056	0.260	27.373	0.610	559.822	-0.124	-2.089	-4.898
1996-2002	63.502	0.112	31.075	0.135	546.243	-0.024	-4.657	-5.574
2003-2008	53.456	-0.158	21.915	-0.294	612.130	0.120	1.311	2.443
2009-2015	53.467	0.0002	21.762	-0.006	949.006	0.550	0.0003	0.012

Source: Authors' computation

Note: *grohc* = growth rate of head count, *gropg* = growth rate of poverty gap, *pcgdp* = per capita GDP, *pcgdpgr* = growth rate of per capita GDP, *Povheac_1.90* = growth-elasticity of poverty using head count as a measure of poverty, *povgap_190* = growth-elasticity of poverty using poverty gap as a measure of poverty

Employment elasticity of growth in Nigeria, 1981–2014

Ajakaiye et al. (2015) calculated the employment elasticity of growth for Nigeria between 1981 and 2014. The study adopted the method of computing a log linear regression equation between employment and GDP to generate both aggregate as well as sector-specific employment elasticities for Nigeria using annual data. The results, which are presented in Table 7 indicate that the elasticity of employment with respect to economic growth has been generally low except for services. The aggregate employment elasticity estimates for Nigeria is estimated at 0.11, which implies that with every 1 percentage point growth in GDP, employment increases by just 11 basis points. The implication is that the relative high growth has not led to an appreciable increase in employment (Ajakaiye et al., 2015).

Table 7: Employment Elasticities of Growth in Nigeria

Sector	Estimated elasticity
Overall	0.115240***
Agriculture	0.4810***
Manufacturing	0.3030
Services	0.8531***

⁶ Zambia and Indonesia were also considered in the analysis as cases of extractive economies

Note: ***, ** and * represent the significance at 1 per cent, 5 per cent, and 10 per cent, respectively.

Source: Ajakaiye et al., (2015)

The results from Table 7 indicated that agriculture has elasticity of 0.48, while services have generally been employment-intensive at 0.85. Manufacturing employment elasticity is 0.30 and insignificant. This is the sector that should constitute a repository of more productive, remunerative and, hence, decent jobs. The findings therefore revealed the low labour absorptive capacity of the Nigerian economy at the aggregate and at sectoral levels (especially manufacturing). This supports the notion that growth performance in Nigeria is, after all, a jobless one (Ajakaiye et al., 2015).

Quality of Growth Spells for Nigeria

Davis (2009) uses the growth spell categorization methods to assess the often contrasted development experiences of Nigeria as an extractive economy.¹ Positive growth is beneficial to the poor and negative growth is harmful to the poor, no matter what the structure of the economy. According to Table 7, Nigeria, which is often mentioned as epitomizing the Resource Curse (Ross 2007), had three measured growth spells from 1959 to 1997. The first growth spell, measured over a 26 year period, was positive, and was unambiguously anti-poverty: real incomes increased across the entire income distribution. The next two growth spells, each lasting 6 years, were negative, and both were unambiguously pro-poverty. The first of these spells was also unambiguously pro-inequality, making it unambiguously not pro-poor overall. These evidences are indeed supportive of our arguments that growth is indeed immiserizing in Nigeria. The next section will take a closer look at the reasons behind the results to bring the findings into context.

Table 8: Quality of Pro-Poor Growth Spells

Income or Consumption Survey Year	Annual growth in mean income level, 1985 PPP dollars, by cumulative income percentile					Length of growth spell in years; positive(+) or negative (-) growth	Quality of growth spell
	g(20)	g(40)	g(60)	g(80)	g(100)		
1959							
1985	1.64	2.84	3.49	3.53	2.22	26 (+)	Anti-poverty
1991	-7.16	-4.38	-2.97	-1.7	-0.35	6 (-)	Not pro-poor
1997	-0.05	-1.99	-2.94	-3.73	-1.49	6 (-)	Pro-poverty

Source: Davis, 2009

Note: Not pro-poor: Income of the poor unambiguously decreases; inequality unambiguously increases (Immiserizing growth). $g(20)$ = Income share held by lowest 20% of the population; $g(40)$ = Income share held by lowest 40% of the population; $g(60)$ = Income share held by 60% of the population; $g(80)$ = Income share held by 80% of the population; and $g(100)$ = Income share held by 100% of the population.

Beyond the Econometrics: Why Immiserization?

The assessment of the growth effect of poverty and inequality goes beyond the mere running of regressions adopting absolute and relative measures. Poverty has many dimensions and may include inadequate access to government utilities and services, environmental issues, poor infrastructure, illiteracy and ignorance, poor health, insecurity, social and political exclusion. In urban areas, the burden of demand of services has effects on school enrolment, access to primary health care, growth of unsanitary urban slums. Also in rural areas, poverty manifests itself more in the agricultural sector and food security. In this respect, the dollar-a-day benchmark or income distribution at quintiles may not serve as the best guide to policymakers in terms of identifying the structural obstacles that hinder growth acceleration and ensuring that faster growth translates into poverty reduction. We therefore highlight some of these factors as the reason why growth in Nigeria has been immiserizing.

- **Poor infrastructural provision and inadequate access to government utilities and services**

The poor provision of basic infrastructure is one of the reasons growth has been immiserizing in Nigeria. The low levels of access to basic facilities are direct result of the nature of income distribution, which is heavily weighted against majority in the country. The quality of infrastructure is currently in a deplorable state despite being able to boast of extensive infrastructure of roads, railroads, airports, and communication networks. The road system is the most important element in the country's transportation network and responsible for about 95 percent of all the nation's goods and passengers. But currently, many of the roads are in disrepair because of poor maintenance and years of heavy traffic. These has made it difficult for agricultural goods to be transported adequately and led to the perishing of most agricultural goods. The rail system that would have served as an important mode of transport is also moribund. It is an important mode because it is the cheapest means of transporting goods and passengers. Its availability and efficiency has the capacity to reduce the cost of production and facilitate industrialization and employment generation. It is only recently, that the standard gauge railway track from Lagos to Ibadan was commenced by the Federal Government.

There are currently 23 grid-connected generating plants in operation in the Nigerian Electricity Supply Industry (NESI), with a total installed capacity of 10,396.0 MW

and available capacity of 6,056 MW. Most generation is thermal based, with an installed capacity of 8,457.6 MW (81% of the total) and an available capacity of 4,996 MW (83% of the total). Hydropower from three major plants accounts for 1,938.4 MW of total installed capacity (and an available capacity of 1,060 MW) in a country of about 170 million people. As a result, power supply is very erratic in Nigeria. About 75% of Nigeria's 170 million people still live without access to regular electricity supply despite statistics indicating that 45 per cent of the country's population is currently connected to the national grid, regular supply is still restricted to just about 25 per cent of the population.

Most of the people with access to electricity are found within the urban areas of the country, thus leaving citizens in the rural areas with less access to electricity supply. It is estimated that the nation has as much as 90 per cent deficiency in electricity supply while in off-grid areas where some 50 per cent of Nigerians live, access to electricity is practically zero. Even in on-grid areas, power outages are still a recurrent theme and this has continued to pose serious constraints to economic development (NAEE, 2015). This has continued to impose huge cost on the economy as the households and firms (especially the small and medium firms) have to generate their own power supply. Also, the inadequate supply of electricity has adversely affected the industrial sector in Nigeria with some firms relocating to neighboring countries where electricity supply is more stable. The energy poverty has therefore led to an increase in unemployment and exacerbates poverty and inequality.

- **Long-term ethnic conflict and civil unrest**

Nigeria has historically experienced much ethnic conflict. With the return to civilian rule in 1999, militants from religious and ethnic groups have become markedly more violent. While this unrest has its roots in poverty and economic competition, its economic and human damages further escalate the problems of poverty (such as increasing the mortality rate). The militants' activities (MEND, Niger Delta Avengers) in the Niger Delta has crippled the activities of oil companies and led to a decline in oil exports. In addition, the insurgency activities of Boko Haram in the North Eastern part of the country have affected the agricultural economic activities of the sub-region. The current spate of Fulani herdsmen attack on the local communities is also another dimension of the ethnic conflict in Nigeria. As a result, a large number of able body individuals are currently living in internally displaced camps. These are individuals that should have been productive and improve the output level in the country. Thus, the rise in conflicts across the country is also partly responsible for the lack of pro-poor growth recorded.

- **Rising Unemployment**

The increasing level of unemployment has shown the weaknesses of the growth recorded in Nigeria. The scenario has been made worse by the lack of employable

skills due to inappropriate school curricula. In most cases, the skills that job seekers possess do not match the requirements of employers. The present educational system in Nigeria has its liberal bias which indeed over supplies the labour market with graduates who do not possess the skills required by employers. The bulk of the graduates therefore lack entrepreneurial skills to facilitate self-employment. Consequently, the productive years of the graduates are spent looking for white collar jobs. Growth will not translate to poverty reduction in the presence of such rising unemployed youths.

- **Illiteracy and Ignorance**

The widening mass illiteracy is another fundamental factor that limits the poverty reducing effects of growth. This is because illiteracy breeds ignorance and any society characterized by ignorance will be unaware of their basic needs and improvement or development will be an elusive venture. While educational attainment determines access to employment, low level of education or the lack of it limits the ability to seek well paid jobs. Illiterates settle for any menial jobs and earn wages that cannot meet their personal and family's minimum needs (Afonja and Ogwumike, 2003). This therefore perpetuates poverty and inequality. The rural population is the worst hit in this particular respect. Although the government recognized the importance literacy for the population, the approach has been a faulty one. The emphasis has been on educating the nation, rather than the people in terms of mass literacy approach. Part of the problem has been how to set the standard level of education for all of Nigerians. For example, should a farmer have the same level of education as a permanent secretary? The rural inhabitants do not place great value on literacy as they believe that it is not needed to survive in their given environment.

- **Inadequate poverty reducing institutional framework**

The need for poverty eradication as a means of improving the standard of living of the people has led to the conceptualization and implementation of various poverty eradication and alleviation-programmes. Some of these programmes and institutions designed to impact on poverty include the Directorate of Food, Roads and Rural Infrastructure (DFRRI), the National Directorate of Employment (NDE), the Better Life for Rural Women Programme (BLP), the Family Support Programme (FSP), SURE-P, YOUWIN and the National Poverty Eradication Programme (NAPEP) which took off in 2001. The NAPEP was aimed at eradicating absolute poverty under which a multi-agency implementation structure with coordination, monitoring and evaluating organ was introduced in order to ensure cost effective delivery target with optimal social benefit.

Unfortunately, the poverty level seems to be unresponsive to these plethora of programmes and the windfall of resources allocated for the fight. This is because most of the programmes were not specially targeted towards the poor, though they

affect them. The fact is the poor usually have quite a good perception of their own needs and goals and of what is required to satisfy and make progress towards them. No eradication of poverty can be sustainable without the participation of the poor people. Consequently, the incidence of poverty has largely remained due to public policy inconsistency, absence of coordination, complementation and monitoring, inadequate stake-holding by beneficiaries and operators in poverty policy formulation, policy discontinuity and lack of sustainability, lack of involvement of the traditional institutions and community groups in projects selection and implementation. For instance, the unfriendly payback period from NAPEP is cited by the auto-rickshaw operators as one of the major challenges that they are confronted with (Raji, 2012). With these set of challenges, it will be difficult for poverty eradicating institutions to ensure that growth is not immiserizing in Nigeria.

- **Religion and cultural practices**

Certain cultural and religious practices worsen the poverty levels. The culture and religion limits the role of women in most parts of the country and also curtail their access to land and other productive resources. In addition, some religious practices do not allow women to work. These set of unfavourable traditional practices as well as cultural rigidities have obviously contributed to poverty by keeping agricultural production low and impede individual efforts to disentangle from the clutches of poverty. The ideas that particular gender practices are ageless, part of our traditions or religiously ordained, are often cited as reasons to deny human rights which perpetuate gender inequality.

- **Food price inflation**

Price inflation lowers the purchasing power of a given nominal income and therefore affects expenditure decisions. Particularly, persistent inflation of food prices is particularly harmful for the poor and may wipe out part of the progress that has been achieved in reducing poverty.⁷ This is because rising food prices exacerbate inequality because the poor spend a disproportionately large share of their income on food, and food staples account for a large share of their total food expenditure. Moreover, households that currently live just above the poverty line may fall into poverty as a result of food price increases. In the case of Nigeria, food price inflation has largely fluctuated. The value peaked at around 38% in September 2005 before declining to a negative value in May 2006 (Figure 6). It has started increasing in recent times and currently stood at 17.10% as a result of the economic recession the country is passing through.

⁷ However, the final effects on the poor will depend on whether they are net sellers or net buyers of food, as well as whether they depend on the agricultural sector for wages or other sources of income.

Figure 6: Food Price Inflation Year-on-Year Change (%)



Neglect of the agricultural sector

The agricultural sector, which was Nigeria’s major means of income before the discovery of oil, has been largely neglected despite providing the means of livelihood for over 70 percent of the population, a major source of raw materials for the agro-allied industries and a potent source of foreign exchange earnings. The Dutch Disease therefore became manifest in the Nigerian economy given the increase in the development of the oil sector and a decline in the agricultural sector. The government has made substantial efforts to implement policies and programmes that include Operation Feed the Nation, Green Revolution, National Accelerated Food Production Project, Agricultural Credit Guarantee Scheme, and Agricultural Development Projects to address the challenges in the agricultural sector. Unfortunately, the bulk of the programmes have not been able to stimulate growth in the agricultural sector due to some of the constraints which include:

Poor infrastructural facilities in Agriculture

- Inadequate road network between the agricultural producing rural areas the urban areas
- Absence of on-farm and off-farm storage facilities
- Lack of electricity
- Poor irrigation facilities
- Absence of health care facilities that leads to loss of man-days due to ill-health
- Few numbers of primary and secondary health facilities.

Manpower/Skill Development

- Inadequate number of extension workers
- Shortage of technical manpower especially for tractor operation and farm mechanization
- Poor labour supply in the context of most young productive youths leaving the farming/rural areas to engage in commercial motorcycle riding in the urban areas to make ends meet.
- Rudimentary nature of the agricultural system

Socio-cultural factors

- The land tenure systems in some part of the country limit land availability to would be farmers, women and the landless giving rise to small and uneconomic holdings.
- Rise in the activities of land grabbers.

Economic factors

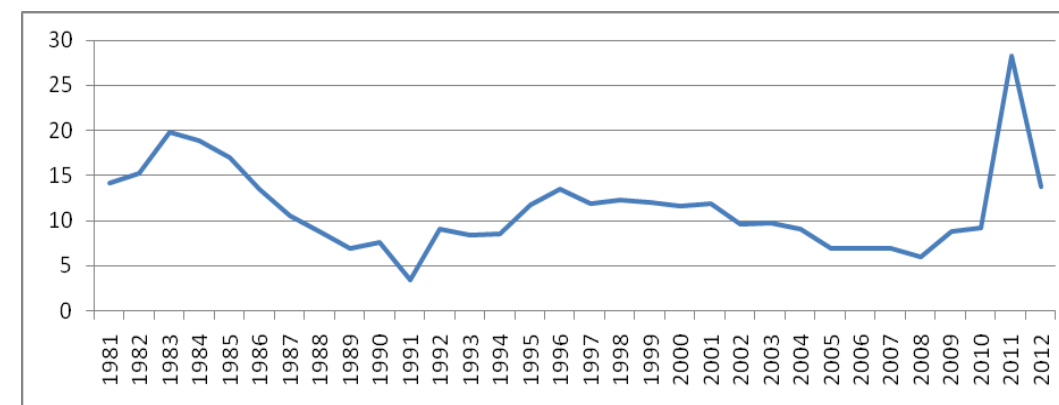
- Rise in the prices of inputs (fertilizer, herbicides, pesticides)
- Increase in wage rates in the rural areas due to few labour supplies.
- Poor linkages between the agricultural sector and the industrial sector

Environmental factors

- Increasing occurrence of pests and diseases
- Perennial drought and erosion
- Increasing problem of desertification

The poor performance of the agricultural sector has therefore led to high importation of food which has affected the level of external reserves of the country. These are the set of commodities that should have been produced in Nigeria with the attendant benefits of job creation and other opportunities for the country. The neglect of such a sector with high impact will continually made growth to be immiserizing.

Figure 7: Food and Live Animal Import as a Percentage of Total Import



CBN Statistical Bulletin, 2013

- **High Level of Corrupt Practices**

Nigeria is ranked among the most corrupt countries in the world. The country is currently ranked as the 136th most corrupt country out 168 countries in the 2015 Corruption Perception Index of Transparency International. The corrupt practices range from extortion by public functionaries to advance fee fraud. At the national level, there is hardly any form of service that would be rendered without giving or receiving undue favours and gratification. In certain public sector cases, a corruptive behaviour is induced directly by sheer pressure of poverty or indirectly by greed so as to escape poverty in the future after retirement with their unborn generations. Consequently, corrupt practices has made public institutions to be grossly inefficient and diminished productivity in the public and private sectors of the economy.

For example, while Nigeria recorded a huge inflow of revenue from crude oil resources, it also recorded a huge outflow in the importation of refined petroleum products. However, there were allegations of corrupt practices in the payment of subsidies to importers of refined petroleum products. Some of the importers were alleged not to have imported any petroleum products but still go ahead to collect subsidy payments from the government. The failure of most of the poverty alleviating programmes of the past governments was attributed to corruption. Although there are institutions (Economic and Financial Crime Commission (EFCC) and Independent Corrupt Practice Commission) established to address the scourge, their effort has been limited. The impact of growth on poverty and income distribution will continue to be limited if such corrupt practices is allowed to continue.

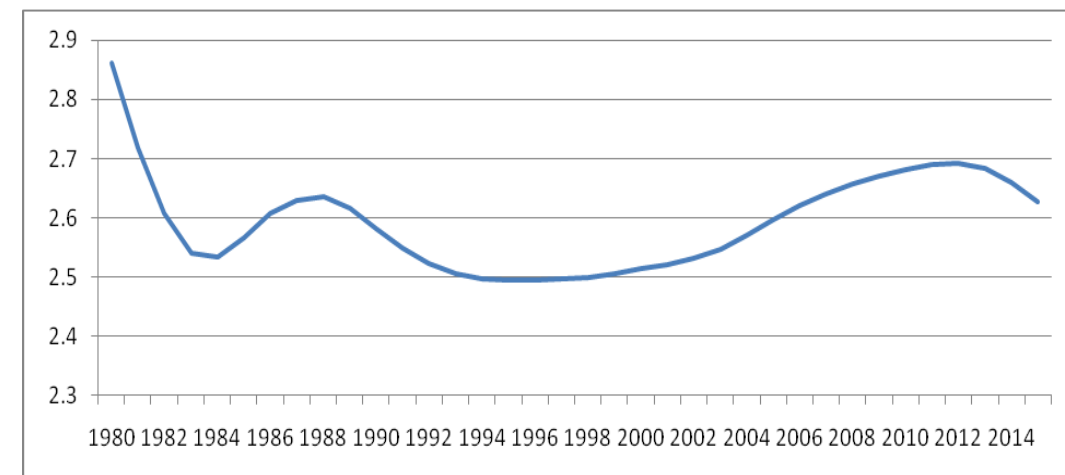
- **Poor Governance**

Good governance is still a major challenge in Nigeria. The weaknesses of Nigeria governance was highlighted in the year 2016 Mo Ibrahim Index of African Governance. The index ranked Nigeria 36th out of 54 countries. The current ranking is not a surprise because Nigeria is yet to record impressive growth in many critical sectors. Although the country had favorable ranking with the peaceful democratic transition in 2015, it ranked poorly in other indices such as human rights and good governance. At the Overall Governance level, the three highest scoring countries in 2015 are Mauritius, Botswana and Cape Verde, and the three most improved countries over the decade are Côte d'Ivoire, Togo and Zimbabwe. These countries were ahead of Nigeria on this ranking. All these evidence indicate one point to one thing: failure of leadership. The path of transmitting growth to poverty reduction requires good governance.

- **High population growth**

It has been argued that rapid population growth aggravates poverty. Population growth holds down returns to labour relative to capital and other factors of production, depressing wages and worsening the income distribution. Due to rapid annual population growth averaging about 2.6 percent, Nigeria needs to experience a strong reduction in the poverty rate in order to reduce the absolute number of the poor (Figure 8). The unprecedented increases in the population have over stretched the available public social and infrastructural facilities in the face of dwindling resources.

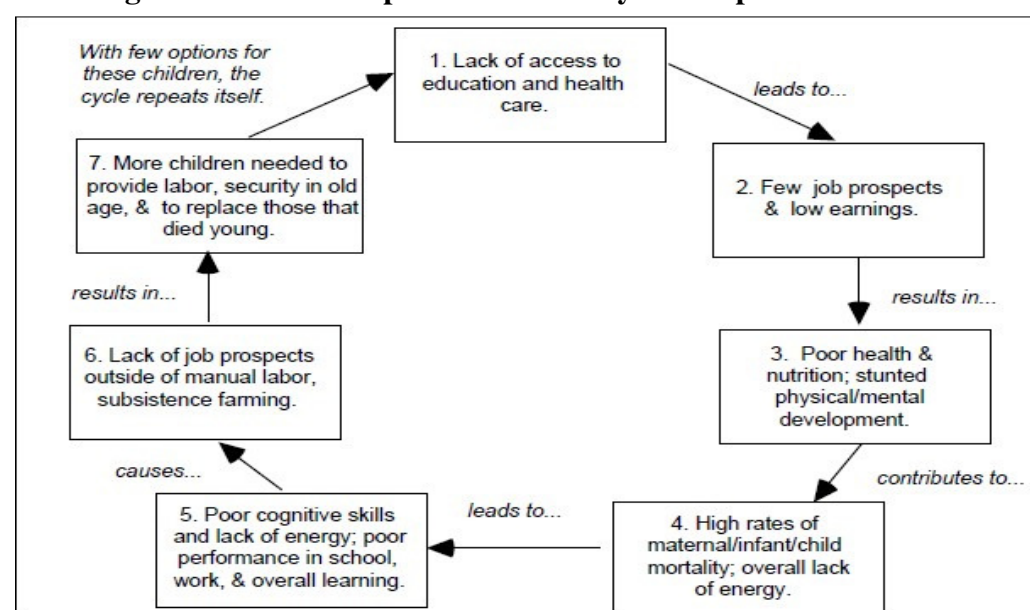
Figure 8: Population growth (annual %)



Source: WDI, 2018

According to Creative Change (1999), the cycle usually starts with the lack of access to education and health care. In the case of Nigeria, the cost of education (books and other fees) prevents many families from sending their children to schools. In addition, girls may be discouraged from attending schools due to cultural or religious beliefs. Consequently, without access to education, those in the poorest group have few job prospects outside manual labor and subsistence farming. In this case, wages are low and often inadequate to meet the basic needs. As a result, the low wages implies that the families cannot afford enough nutritious food which results in malnourished mothers and children that are stunted in physical and mental development. This leads to a reduced ability to work and learn, even if the children are opportune enough to go to school. The lack of a good education implies that children have few job choices aside from manual labor or subsistence farming. Nevertheless, individuals who are dependent on subsistence farming are likely to have more children to provide the much-needed labor and income. Finally, with little access to health care and education, the next generation is likely to repeat the cycle.

Figure 9: Relationship between Poverty and Population Growth



Source: Creative Change (1999) "What is the relationship between poverty and population growth?" Creative Change Educational Solutions: http://rprogress.org/training_manual/20-PopulationPoverty.pdf (Accessed December 4, 2016).

Rural Urban Migration

The bulk of the able-body youths in Nigeria are migrating to the urban centers from the rural areas because of greener pasture. This is because of the higher government spending in urban areas than the rural locations which has made them unattractive. However, job opportunities in the cities are very limited. Thus, the rate of urbanization of the youth has continued to create unemployment. Given the limited opportunities, majority of the urban poor work long hours in low-paid, insecure and unsafe jobs and are exposed to a wide range of environmental hazards because most low-income and informal settlements (temporary camps for construction workers or small temporary structures on public land or settlements set up by recent migrants often on the urban periphery) lack basic infrastructure. Since most of such housing is considered illegal, their inhabitants hardly have access to public infrastructure (all-weather roads, water piped to homes, sewer connections and drains) or services (including health care, emergency services, safety nets and pre-schools and schools). All these factors have implications for inequality which portends grave consequences for immiserizing growth.

Credit constraints to the Real Sector (Agriculture and Manufacturing)

Sectors such as agriculture and manufacturing are getting decreasing shares of the total loans and advances of commercial banks in Nigeria. The percentage share of agricultural sector loans and advances declined from 8.07% in 2000 to 2.46% in 2005 and 1.67% in 2010. Similarly, the credit allocation of the commercial banks to

manufacturing sector fell from 27.6% in 2000 to 17.8% in 2005 and 14.4 in 2011 (Table 6). Ironically, these are the productive sectors that the country looks up to for achieving its vision of growth and economic development (Ajakaiye and Babatunde, 2015).

Table 6: Sectoral Distribution of Commercial Banks' Loans and Advances (%)

Period	Production				General Commerce				Services			Others		
	Agriculture, Forestry and fishery	Manufacturing	Mining and Quarrying	Real Estate and construction	Bills Discounted	Domestic Trade	Exports	Imports	Public Utilities	Transport and Communications	Credit to financial institutions Government	Personal And professional	Miscellaneous	
1970	1.99	21.7	1.9	7.4	1.68	9.16	19.8	1.7	0.2	5.41	0.77	0.37	6.63	5.97
1980	7.28	30.8	0.8	20.9	0.42	10	1.58	7.05	1.39	7.65	3.26	2.52	3.5	2.86
1990	16.2	30.3	1.4	12.3	1.18	10.6	2.87	3.93	0.83	3.6	2.77	4.46	5.12	4.32
2000	8.07	27.8	6.4	-	-	-	4.98	-	-	-	-	-	-	52.8
2001	7.01	26	8.9	-	-	-	4.34	-	-	-	-	-	-	53.8
2002	6.27	24.5	7.4	-	-	-	2.8	-	-	-	-	-	-	59.1
2003	5.13	24.3	7.9	-	-	-	2.85	-	-	-	-	-	-	59.8
2004	4.46	21.9	8.6	-	-	-	2.06	-	-	-	-	-	-	63
2005	2.46	17.8	8.7	-	-	-	1.34	-	-	-	-	-	-	69.7
2006	1.96	17.7	10	-	-	-	2.09	-	-	-	-	-	-	68.3
2007	3.11	10.1	10	-	-	-	1.38	-	-	-	-	-	-	75.2
2008	1.36	12	11	5.99	-	-	0.96	1.86	0.59	16.7	6.91	9.16	-	33.6
2009	1.52	11.1	13	8.73	-	-	0.51	1.35	0.84	8.71	13.8	3.95	-	24
2010	1.67	12.8	15	8.7	-	-	0.58	11.7	0.66	10.7	11.3	4.86	-	21.8
2011	3.49	14.4	18	6.2	-	-	0.49	10.3	0.94	17.3	4.15	6.83	-	18.1
2012	3.88	13.1	21.7	6.6	0	0	0.81	8.5	0.4	11.9	3.1	7.76	-	22.9
2013	3.44	11.8	21.5	7.3	0	0	0.04	7.6	2.2	13.9	3.2	7.18	-	21.8

Source: Computed from CBN Statistical Bulletin, 2013

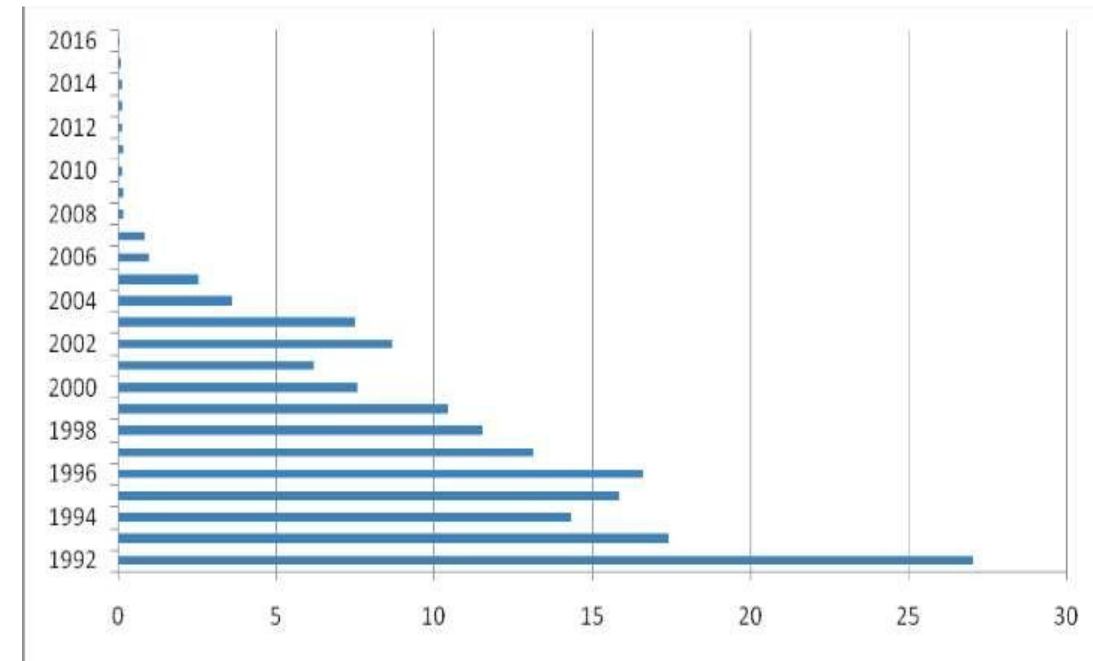
In contrast, commercial banks' credit to the mining sector that used to be low in the 1990s has increased in the recent years. It increased from 1.4 percent in 1990 to 15.0 percent in 2010 (the highest out of all the sectors). Beginning from 2008, the sectors that received significant share of credit allocation are transport and communication, financial institutions, government and import. These findings are mirrored by the over-dependence on the oil sector for foreign exchange earnings and government revenue, despite its minute backward and forward linkages with the economy. For example, between 2005 and 2010, the agricultural sector attracted on average 2.0 per cent of the total credit in the economy in contrast to its average contribution of 42.2 per cent to the GDP over the same period.

This suggests that the real sectors have suffered access to commercial banks' credit. The low credit to the sectors by the commercial banks has been attributed to a number of reasons, notable among which are the inherent risk and insufficient collateral, poor managerial ability, low ability to repay, unfavourable growth prospects in the sectors, and the perception of the sector as non-strategic to the business models of the commercial banks. Hence, as long as these concerns linger, the issue of financing the real sectors in Nigeria would require more than just providing funds to the sectors (Ajakaiye and Babatunde, 2015).

The small scale enterprises sub-sector (SSEs) is a segment of the private sector that is expected to be given priority in terms of allocation of credit in the economy. This is because of its resilience and capacity to generate increased employment and output. Unfortunately, commercial banks credit to the SSEs has been on a downward trend since 1992 as shown in Figure 8. The percentage fell precipitously from around 49% in 1992 to about 0.16% in 2010. It should be recalled that since the initial rule that made it mandatory for banks to grant a minimum of 20% of their credit to small scale enterprises was abolished in 1996, Nigerian banks have paid very little attention to this sector⁸. Yet this is a sector that can serve as a good employer of labour in Nigeria given its economic importance.

⁸ This finding is important given that most Nigerian enterprises in the real sector are still of micro and small scale (NBS-SMEDAN, 2012)

Figure 8: Commercial Banks Loans to Small Scale Enterprises as Percentage of Total Credit



Source: CBN Statistical Bulletin, 2016

- **Enclave-type production in Crude Oil and Agricultural Primary Product Exports**

Nigeria oil industry has continued to operate with minimum linkages with the domestic economy despite the strategic importance of the sector in the Nigerian economy. Most of the oil companies usually comes with their staff and largely ignores the Nigerian workers except in few situations. In addition, the few agricultural exports are without value addition. Nigeria risk being competitively trapped—exporting low-skill, low-value primary goods with little chance to increase value-added share in global trade. Economic growth in the context of such disconnection and concentration in primary activities will not translate into poverty reduction.

- **Economic Policy Management**

Over the years the macro-economic and monetary policies have been poorly managed. At independence, monetary policy in Nigeria always had a commitment to development. The fervor that followed independence also made it natural to give precedence to development. To maintain price and financial stability, direct monetary instruments such as credit ceilings, selective credit controls, administered interest and exchange rates, fixing of cash reserve requirements, minimum rediscount rate and liquidity ratio among others were employed. However, the adoption of the structural adjustment programme

(SAP) in 1986 led to a shift in paradigm and the economy became more neo-liberal. The assumption was that markets are more efficient than the State in resource allocation and that the appropriate role of the latter should be to provide an enabling environment for the private sector to flourish. Consequently, the outcome was the complete jettisoning of the CBN's engagement with the economy on the development side with more focus on maintaining price and financial stability.

In the process, the CBN adopted the inflation-targeting framework to control inflation and maintain price stability. The intended or unintended consequence of this monetary policy stance in the overall economy begins with the reduction or stagnation of credit to the private sector, particularly, small and medium enterprises by commercial banks. However, another framework for monetary policy implementation was introduced in December 2006 to enable CBN leverage on the success of the banking system consolidation. Elements of the new framework included the introduction of the Monetary Policy Rate (MPR) to replace the MRR, cash reserve requirements (CRR) and a standing lending and deposit facility (Dalhatu, 2012). However, the need to fight inflation and maintain credibility with markets and economic agents led the authorities to give priority to the MPR. The success of the manipulation of the policy rate can be seen in the downward trend of inflation in Nigeria. Inflation was reduced from a double digit figure of 12 percent in December 2012 to 9.4 percent in November 2015 (CBN, 2015).

Nevertheless, while the adjustment of the MPR seems to have stabilized inflation, it has continuously been set at a high rate of between 12 and 13 percent which translates to bank lending rate in excess of 20 per cent. This implies that the management of inflation in Nigeria has focused on the demand side of the economy. The underlying assumption is that excess demand is responsible for inflation and therefore the strategy has been to manage the aggregate demand through the MPR. However, inflation in the Nigerian context is not only a demand-pull phenomenon but also cost-push (Ajakaiye and Babatunde, 2016).

Cost-push factors activate through the supply-side of the economy by increasing the cost of production. For example, when the central bank raises the policy rate, the bank lending rate also increases. The increased bank lending rate is then transmitted into the cost of production of the manufacturing firms. Prices are pushed up by the rising costs which are then passed onto the consumers in the form of higher product prices. The impact of the bank lending rate on the goal of securing economic growth with minimal inflation is quite significant, given the heavy reliance of the producers on financial resources and services as input in the production process. This is especially so given the pervasive mark-up pricing regime in all sectors of the economy (Ajakaiye and Ojowu, 1991; Ajakaiye and Omole, 1991; Ajakaiye and Odusola, 1995; Ajakaiye, 2002).

Hence, the level of growth in the real sector has been affected negatively because of high bank lending rate which is responsible for the current high cost of production in the manufacturing sector (Adebisi, 2001; Adebisi and Babatope-Obasa, 2004; Rasheed, 2010). The higher production costs mean the reduction of the workforce which has implications for the rising unemployment, poverty and inequality in Nigeria. Higher prices will also cause workers to demand higher wages causing a wage price spiral. Hence, while the inflation variable has been stable under the control of the monetary authorities in Nigeria, it has come at the cost of high rate of unemployment, poverty and inequality. Any growth that is recorded under such a scenario will surely not be poverty or inequality reducing.

The combined effects of the above factors have made growth to be immiserizing in Nigeria. The presence of such constraints implies that growth may exist but poverty and inequality will be its partner. These factors has therefore showed that the connection between growth and poverty is not a direct one, and the variation associated in the dimension of poverty across the economy that is a reminder that the process through which additional income is distributed and the structural characteristics of the economy matters to poverty and inequality outcomes.

VII. Concluding Summary

Nigeria experienced a steady and unique wave of growth over the last one decade. The growth was largely attributable to the surge in the crude oil price which is the dominant export for Nigeria. However, poverty and inequality also increased simultaneously over the same period. The implication is that the growth is immiserizing. While the government at all levels in the last three decades has implemented a plethora of policies and programmes aimed at reducing poverty and inequality, the depth and severity of the situation are evidence that the policies were unsuccessful. Nevertheless, empirical evidence shows that economic growth did not translate into a reduction of poverty at the absolute and relative levels of poverty. The immiserizing nature of the growth was however supported by the estimates from the growth elasticity of poverty between 2003 and 2015, the employment elasticity of growth and the quality of the growth spells in Nigeria.

However, this does not imply that, at the margin, economic growth is not beneficial to the poor. Discounting the entire evidences amount to throwing the "baby out with the bath water". Factors such as infrastructure provision, good governance, life expectancy, population growth, food price inflation, corruption, illiteracy among others appears to be more important determinants of welfare than the growth rate. A fundamental reason why it is difficult to reach a definitive conclusion regarding the link is the web of interrelationships that is involved in improving the welfare of the populace in the prosperity period of remarkable growth. While economic growth can have a significant

impact on poverty, but so are many other factors explaining weak or missing linkages between macro-economic growth and household incomes. Hence, the characteristics of this growth process in the light of findings of this study hold important development policy implications.

Given the multidimensional nature of poverty, it is obvious that a one size fit all approach should be avoided. Domestic policies are necessary to reduce the various constraints inherent in the economy that makes growth immiserizing. This indeed will require stabilization and structural measures that guarantee the efficient use of resources coupled with the provision of basic social services. This is because effective infrastructure development will integrate the country into the benefits associated with the fast shrinking global system. Thus, there is a need to spur the policy space not only to stimulate job creation and productivity within sectors, but also to ensure growth in sectors that encourage labour shifts from low- to high-productivity sectors of agriculture and manufacturing. In addition, the policies and programmes should be inclusive (primary beneficiaries should actively participate at all stages of the policy cycle) and gender sensitive and particularly pro-women. In this regard, it is suggested that certain cultural practices should also give way to modernity. This path offers Nigeria the best prospects for sustaining economic growth and poverty and inequality reduction.

The basic limitation encountered in the course of the study is data availability on some specific variables such as the number of poor at each quintile that would have made the study more policy relevant. It is also common knowledge that there are margins of errors in the income group statistics and there may also have been other biases that have distorted the results. Nevertheless, it should be noted that the main general trends and findings that have been discovered in this study are so pronounced that potential data biases have to be large indeed to reverse them. While the study gives some useful guidance to policy makers, a number of points could be clarified by further work, and this should give greater specificity to policy guidelines. For example, the analysis has been mainly cross-sectional at a relatively high level of aggregation. This approach precludes in-depth analyses of many sector-specific issues that may be important. Hence, the analysis conducted here could thus be supplemented by detailed study of the growth in the different sectors, at best using a unified analytical approach.

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